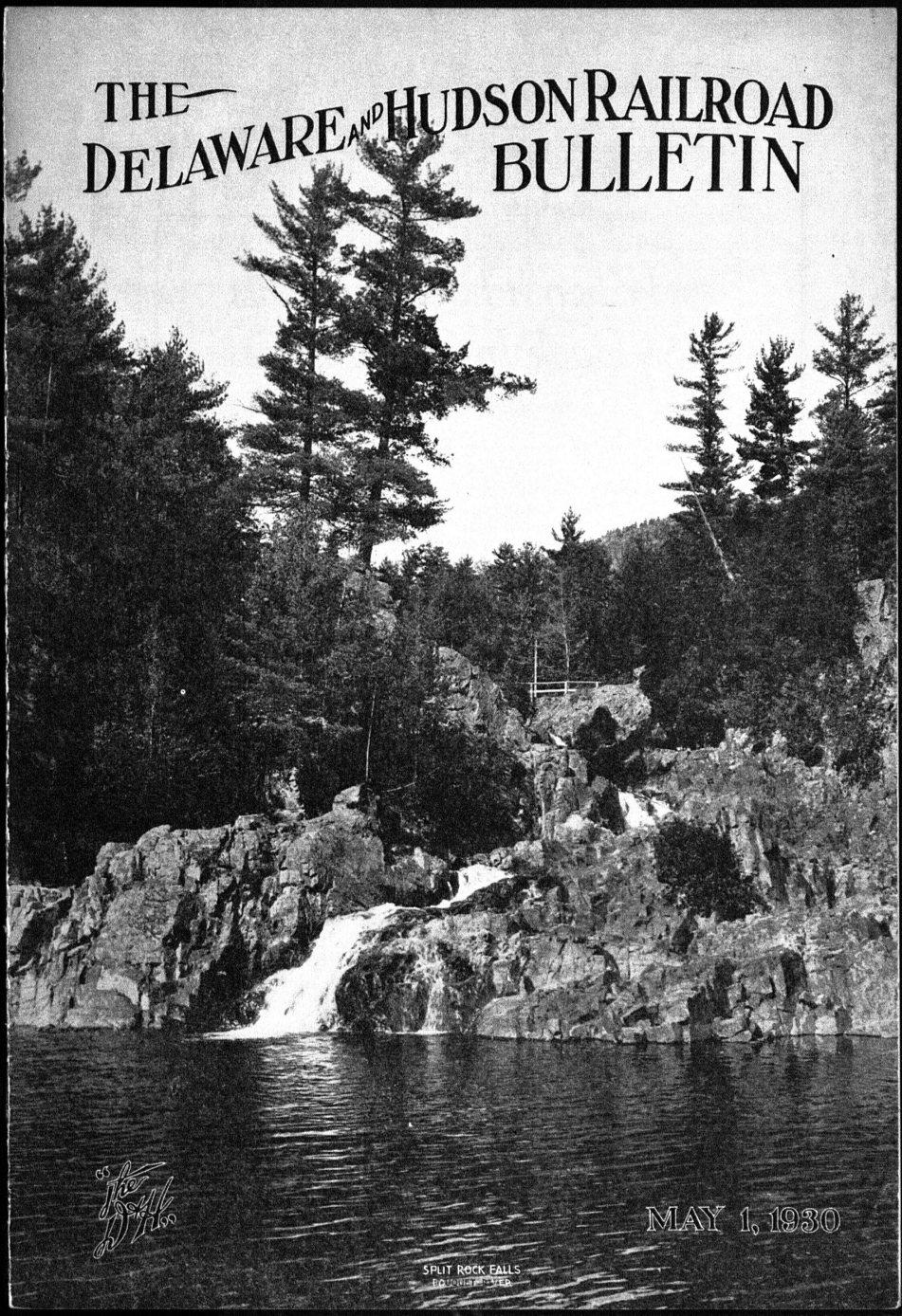
THE DELAWARE AND HUDSON RAILROAD BULLETIN



"The D & H"

MAY 1, 1930

SPLIT ROCK FALLS
BOQUET RIVER

When The Green Gits Back In The Trees

By JAMES WHITCOMB RILEY

In spring, when the green gits back in the trees,
And the sun comes out an' *stays*,
And yer boots pulls on with a good tight squeeze,
And you think of yer barefoot days;
When you *ort* to work and you want to *not*,
And you and your wife agrees
It's time to spade up the garden lot,
When the green gits back in the trees—
Well! work is the least o' *my* idees
When the green, you know, gits back in the trees!

When the green gits back in the trees, and bees
Is a-buzzin' aroun' ag'in
In that kind of a lazy go-as-you-please
Old gait they bum 'roun' in;
When the groun's all bald where the hay-rick stood,
And the crick's riz, and the breeze
Coaxes the bloom in the old dogwood,
And the green gits back in the trees,—
I like, as I say, in sich scenes as these,
The time when the green gits back in the trees!

When the whole tail-fethers o' Winter-Time
Is all pulled out and gone!
And the sap it thaws and begins to climb,
And the swet it starts out on
A feller's forred, a-gittin' down
At the old spring on his knees—
I kinder like jest a-loaferin' 'roun'
When the green gits back in the trees,
Jest a-potterin' 'roun' as I-durn-please—
When the green, you know, gits back in the trees!

The DELAWARE AND HUDSON RAILROAD CORPORATION
BULLETIN

Vol. 10 | Albany, N. Y., May 1, 1930 | No. 9

Learned Telegraphy On Door-latch

For Want of An Instrument, Veteran Agent Mastered Code in Unique Way

BLIZZARDS? Why I can remember the time when every one of the Chateaugay's sixteen engines was tied up in the snow drifts between Dannemora and Lyon Mountain! In the winter time trains hauled by the old narrow gauge engines would leave Plattsburg on their 36-mile trip to Lyon Mountain or for Lake Placid, 82 miles distant, and never be heard from for days at a time. All the dispatcher knew was that they were somewhere en route; when they would arrive depended on their ability to battle through the snow."

JAMES H. WILSON

The speaker, retired AGENT AND TELEGRAPHER JAMES H. WILSON, was well qualified to tell of the Chateaugay road. For over 50 years he had worked with our company on the line which crosses the lofty Adirondacks between Lake Champlain and Lake Placid.

Trains are not so apt to be snowbound nowadays when they are pulled by larger locomotives, and up to date snow fighting equipment is ready to leave the terminals on short notice. However, as one railroad man remarked recently, "You could take a whole train of 50 years ago, engine and all, and haul it away on a couple of flat cars." In fact, that is exactly what did happen to some of the Chateaugay's engines after The Delaware and Hudson absorbed the line and widened the gauge.

Several narrow gauge engines were retained for some time at Lyon Mountain to be used in switching service in the Chateaugay Ore and Iron Company's yard. When they had outlived their usefulness there, they were stranded. The old narrow gauge track had been standardized. Consequently they were loaded on cars and carried over the right of way on which they once ran.

At no place on the Delaware and Hudson lines are conditions quite the same as those on the Chateaugay Branch. Long after the snow and ice have melted elsewhere, the people in the Adirondacks are still fighting blizzards which shut them off from the outer world for days at a time. When winter sets in in October the residents are more or less cut off from the rest of the country until the following April. At times it is necessary to send groceries from some of the larger communities on the branch train to isolated families along the line.

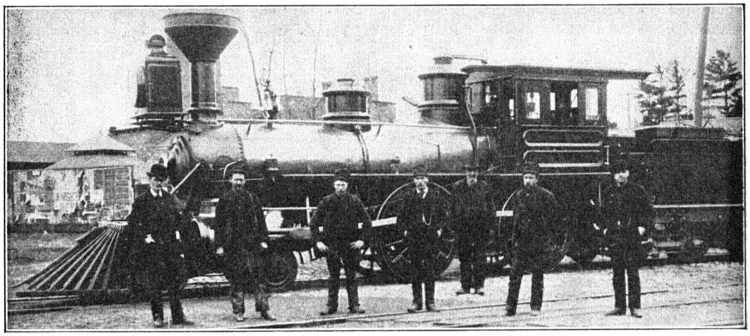
Big game still abounds in the forests along the

miles of track which wind through the mountains. It is not at all unusual for employes to have wild game appear within a stone's throw of the right of way. Late in March of this year dogs chased a young deer into the fence near the station at Russia. Employes captured it and for some time it was kept in a nearby barn so that a wound on its shoulder could heal. Other wild animals and birds abound in the forests all along the tracks. That is why this territory is frequented yearly by thousands of hunters from all parts of the East, to whom it is known as the North Woods.

In this rugged country MR. WILSON first entered the employ of our company in 1879. His first job was at Moffitsville, measuring charcoal as it was brought in from the kilns for use in smelting iron ore. This was long before the day of blast furnaces, and charcoal was used as fuel by the Chateaugay Ore and Iron Company, instead of coke. The ore was put into small smelters, somewhat resembling a blacksmith's forge, and as the iron was melted it formed into a rough uneven mass. These lumps were then pounded into billets under a large hammer.

The charcoal was supplied by kilns in the mountains in which as much as 30 cords of wood were burned at a time. It was then loaded into wagons not unlike a hay wagon. Charcoal, of course, is very light and a team of horses could haul a great quantity. The wagons were so constructed that when they arrived at the smelting plant, the horses could be attached to the rear end of the boards which formed the flooring. In this way the boards were pulled from under the load of charcoal which fell to the ground. The horses were then returned to the front of the wagon and the teamster drove off. The charcoal was then measured with a bushel basket by a "coal accountant" representing the ore company to determine the price to be paid the owner of the kiln. MR. WILSON received twelve and one-half cents per 100 bushels of charcoal he measured out in this manner.

When the railroad was built through the mountains, JAMES decided to learn telegraphy so that he could secure a position at one of its stations. There was no telegraph school such as is operated by our company today, however, and no telegrapher could spare the time to teach JAMES the code or the working of an instrument, so he memorized the code from a copy during his spare moments. Undismayed by the lack of an outfit, he sought a substitute. Happily he discovered that the doorlatch at home, if moved sharply up and down, could be made to reproduce the sound of a telegraph instrument. Day after day JAMES "pecked away on the latch" until he had mastered telegraphy. It is interesting to note, too, that one of the operators who worked with him recently said that this "self made telegrapher" was one of the best on the branch.



Locomotive "*Crown Point*" and Crew

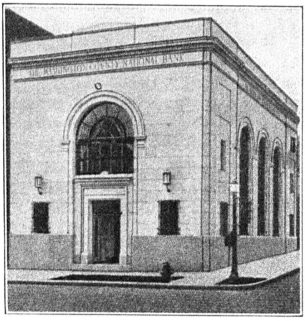
For a number of years MR. WILSON was a relief operator, working at every station between Plattsburg and Lyon Mountain at some time or other. In November, 1902, he was sent to Chazy Lake where he continued until he was retired in 1929.

Despite the years which have passed since his

(Continued on page 139)

Granville—*A Prosperous Community in Northeastern New York State*

IN the year 1850 a settler, having bargained for a farm near North Granville, N. Y., was walking over the land with the owner when, carelessly kicking over a stone or two, he remarked, "There is slate here." The remark awoke a train of thought in the shrewd mind of the proprietor, and the half-completed bargain was delayed to give him time to investigate this theory. Two experts were summoned from Vermont, and their examination showed valuable deposits of slate beneath the rocky soil. Shortly afterward the farm was sold to a company of men who opened the first slate quarry in the vicinity.

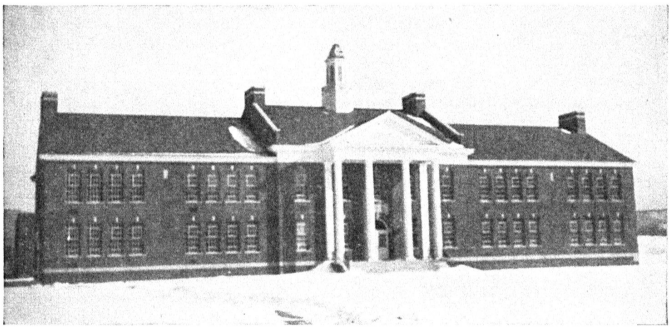


Washington County National Bank

The presence of slate had been known of previously, however, for a report on the minerals of Washington County, made to the State Legislature in 1849, contained a geological map showing that the top soil covered a great deposit of slate. The residents, unaware of the commercial possibilities of the deposits, were merely using ground slate for a top surface on roads and driveways in the neighborhood.

The village of Granville is located on land which was originally ceded to some 30 captains and lieutenants who had seen heroic service in the French and Indian War. Although they never settled here, their claim prevented others from taking possession of it until after the Revolution. After lengthy litigation their title to the property was annulled and the area thrown open to settlement.

In 1780 John C. Bishop and a number of settlers located at Granville where they built saw and grist mills, using the desirable water power of the river. The community which grew up around Bishop's mills and general store was named Granville on account of the large amount



Granville's New High School

of grain which the settlers were able to raise in the fields adjoining the town.

It is interesting to note that a group of St. Francis Indians once sought permission of the settlers to camp near Granville. An aged chieftain argued that his tribe had fished and hunted there for untold ages, finding the best beaver furs in the nearby streams. He said, further, that his people had formerly come to this section to make arrows and hatchets. The chief's mother, over 100 years old, confirmed her son's story. A settler, who at that time was excavating a cellar for a building, found ample proof of the Indian's statement when he unearthed a large quantity of arrowheads and hatchets.

Up to the time the slate industry sprang up, Granville was a typical farming community. The soil, described as "a slaty, gravelly loam," had been found particularly adapted for growing potatoes. A more profitable business, however, was sheep raising, which prevailed throughout the locality. In 1845, a few years before the opening of the first slate quarry, a report indicates that there were 10,902 sheep on farms in the town of Granville. There were thirteen wool manufactories in the county, the largest of which was located on the banks of the Mettowee River at Granville, consuming 25,000 pounds of raw wool annually.

Slate quarrying, although already established at Middle Granville and North Granville, was not commenced at Granville until 1871, when two quarries were opened. One, operated by H. W. Hughes, employed 60 men and produced 23,000 squares of roofing slate annually; the other, the Warren Slate company, employing from 50 to 60 workers, turned out from ten to twelve thousand squares. (A "square" is the amount of slate necessary to cover a surface containing 100 square feet.) As the industry grew scores of Welsh quarrymen from North Wales were attracted to Granville. In later years they were joined by Irish, Poles, and Slavs, who help to make up the present population of 4,000.

In addition to its chief industry, slate quarrying, there is a shirt factory, employing a large number of women, and a camp cot and chair manufacturing plant, with 100 workers.

In March of this year a new high school, housing more than 300 students, was officially dedicated. The structure is of brick, trimmed with limestone and roofed with slate. The walks leading up to it are of multi-colored stone flagging. The building is equipped with all of the latest improvements, including electric clocks intercommunication telephones, an auditorium with a seating capacity of 800, a gymnasium, and up-to-date equipment for instructing the pupils in chemistry, home economics, and business courses, as well as classical subjects.

Granville has a number of other very attractive buildings and institutions. The Emma Lang Stevens emergency hospital, though small, is equipped with all modern appliances. The Pember Library and Museum, endowed by a wealthy resident, contains the latest books and a notable collection of natural specimens of animal life of the neighborhood. There are eight churches, three banks, two theatres, a motorized fire department, and a modern hotel.

Nestling, as it does, in the foothills of the Green Mountains, Granville is one of the busiest and most prosperous communities in the vicinity.

Neatness Counts

TO what extent," asks a reader, "is a boss influenced by the clothes of a young man in his employ?"

Every young man should dress well, and keep himself clean and neat. He should shave every day, get his hair cut twice a month, and have his teeth cleaned and repaired twice a year. His shoes should be shined, his clothes brushed, and his buttons in place.

The boss is unfavorably influenced by a foppish young man, but cleanliness and neatness please everyone.

Clothes are among the "little things" that become important when neglected. If the man of modest ability neglects his clothes he is severely handicapped. Only the man of great ability can afford to be indifferent, and even he loses something by failing to show himself to advantage.

As the world increases its pace and we have less time to spend in each other's company, we are compelled to make quick appraisals. Dusty shoes, run-over heels, sweaty hats, loose buttons, soiled handkerchiefs, frayed collars, stubby beards, greasy complexions, uncut fingernails, spotted vests, unkempt hair, unshaved necks, and unwashed hands compel unpleasant reactions. Underneath there may be the heart of a Lincoln and the brain of an Edison, but the chances are there's just an ordinary man who doesn't think much of himself and doesn't care what others think of him.

That's the way the average boss looks at it.—*Through the Meshes.*

How Oneonta Shop Constructs Self-Clearing Hopper Cars

Group Organization of Force Enables 46 Men to Build Three Composite Coal Cars in Eight Hour Day; Present Program Calls for Total of 2,100 Units

THE development of the coal car on The Delaware and Hudson Lines from the flat-bottomed box on wheels representative of equipment of the Gravity Road as early as 1829 and the four-wheeled "Jimmy" car of four and one-half tons capacity which was the first type operated on the "steam" road in "the sixties" to the triple hopper, self-clearing 85,000 lbs. capacity cars now being constructed in our Oneonta Car Shops, is representative of the progress of rolling stock on our railroad.

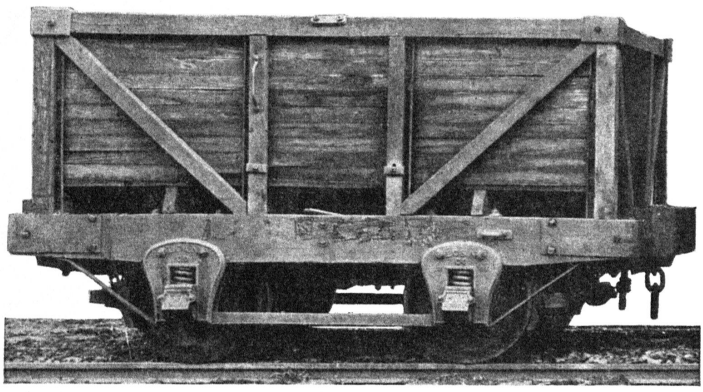
Self clearing cars have proved so successful that this type has been accepted for use on coal carrying roads in general, dealers building trestles to take advantage of the benefits that the use of such equipment affords due to the unloading arrangement by which labor is reduced to a minimum.

For the particular use to which our equipment is put the three-door design is considered to be especially adaptable to our needs and a program for building twenty-one hundred of these cars in the shops at Oneonta, N. Y., is now under way. Work was begun during the latter part of last year on one hundred fifty cars. In the 1930 budget provision is made for building six hundred additional.

These units have a nominal carrying capacity of 85,000 lbs. and the construction of the hoppers is such that the load is self-clearing once the door locking device is released. The cars are very substantially built with a steel underframe and composite superstructure and replace cars of a like nominal capacity having twin hoppers.

The trucks are built with cast steel bolsters and cast steel side frames, the axle journals being 5" x 9" " for which the A. R. A. rules establish an allowable weight of 136,000 lbs. (car and contents) on rails. The twin hopper cars, which these units replace, because of restricted cubical capacity, could not be loaded with coal to full axle capacity by some 8,000 lbs., whereas by designing a car with three hoppers the cubical capacity was increased and the loading objective attained.

The construction program is carried out on a progressive system by which the building of a car is accomplished in ten major steps each of which

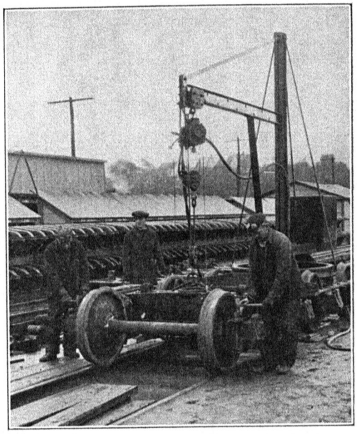


"Jimmy" Car of 1860-70

is carried on by a group of mechanics specially trained for the operation. Although forty-six men in all are required to complete the various steps, exclusive of painting, in the building of each car, under the progressive system only groups of from two to six are engaged in the same operation at any one time. The completion of the underframe construction which requires a gang of 11 men is the only exception. Thus the confusion and lost motion resulting from crowding is avoided. This is essential as all employed on the work are receiving compensation on a piece-work basis.

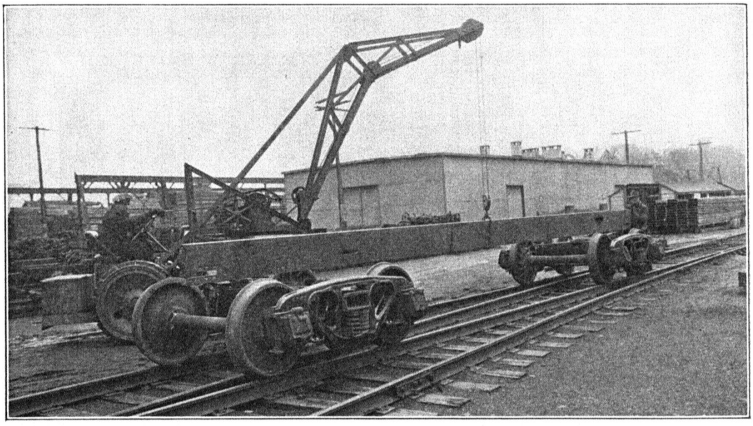
The output schedule calls for building three cars each eight-hour day, the work having been so arranged that each operation is finished in accordance with this schedule, and the car advances to the next "station" in the shop at a fixed time. The work is concentrated on one track about seven hundred twenty-five feet long and, with the exceptions of the truck assembling, painting and stenciling, is done entirely under cover.

With any plan designed to increase plant production thoughtful consideration must be given to the material layout. Thus the steel shapes used in the body construction of these cars are neatly arranged in separate piles, each pile being identified by a metal tag bearing the shape number. This arrangement insures prompt and efficient handling of material as well as accurate accounting of disbursements. In the construction of each car there are over one hundred of these steel shapes, the fabrication of which was done at the steel mills in accordance with D. & H. specifications and blueprints.



Assembling of Trucks

Material deliveries are made to each "station"



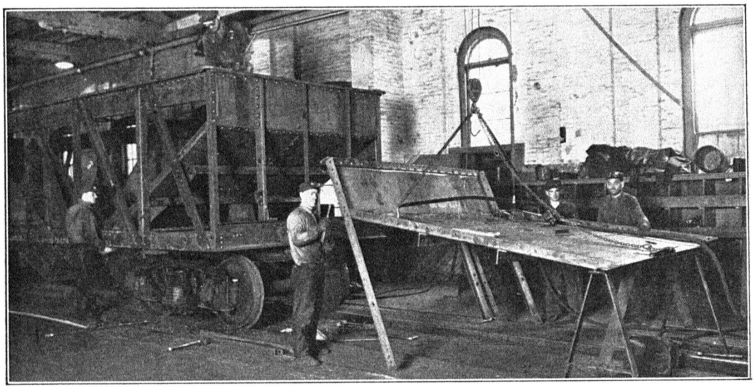
Tractor Placing Center Sills on Trucks

by tractors and trailers, material enough for one car being furnished at each delivery. This work is in the hands of five material men. No delays are experienced as these men are compensated on a piece-work basis in proportion to the earnings of the mechanics, which, of course, creates an incentive to keep an adequate supply of material available. The steel center sills are handled from stock and placed on the trucks by a gasoline tractor equipped with a boom, preparatory to the assembling of underframes.

A description of the operations, which require the driving of nearly twenty-eight hundred rivets per car, follows:

1.—*Assembling of Trucks.* Two men build six trucks each day. The work involves such details as riveting of side bearings to bolsters, and brake beam support brackets to spring planks; assembly and application of bolsters, side frames, spring planks, truck springs, etc.; application of journal boxes, journal bearings, journal wedges, brake levers, bottom connection rods, safety hangers, brake hanger wear castings, etc.

A portable jib crane with an air motor hoist was designed to facilitate truck building operations. This labor saving device was built at Oneonta Car Shop of secondhand and scrap materials and relieves the men of much heavy lifting by hand. Without it additional help would be required at this station. Briefly, it consists of a boom and an air hoist mounted on a scrap freight car truck. The boom is secured to an old engine tire which rests on ball bearings in the center of the truck. The outer edge of this tire rests on four roller side bearings on which it revolves. A metal box filled with scrap iron serves to counter-balance the weight of the boom and load when a lift is being made of such heavy parts as bolsters, wheels, truck side frames, spring planks, etc. At each end of the truck there is a pair of rail clamps which are operated by a lever. These clamps are used to anchor the crane to the rails when it is in operation. As the accompanying photograph indicates, this crane operates immediately behind the truck undergoing construction and the boom can be swung with ease to the adjacent material track to pick up such parts as may be needed.



Steel Construction in Progress

2.—*Preliminary Underframe Construction:* The gang consists of six men and here the work of assembling, fitting, and riveting the underframe is begun. This operation involves the assembling of such parts as center sill channels, bottom cover plates, bolster webs, compression bolster plates, crossbearer sections, etc. Here the draft gears are assembled, raised to position and applied by means of an air hoist. Three hundred forty rivets are driven to complete this work.

3.—*Body Side Frames:* Four men perform this operation which involves assembling, fitting and riveting of the body side frames, top bulb angles, top side plate, stakes, braces and connecting angles, as well as the setting up of sides,

(Continued on page 140)

The
Delaware and Hudson Railroad
CORPORATION
BULLETIN

Office of Publication:
DELAWARE AND HUDSON BUILDING,
ALBANY, N. Y.

PUBLISHED semi-monthly by the Delaware and Hudson Railroad Corporation, for the information of the men who operate the railroad, in the belief that mutual understanding of the problems we all have to meet will help us to solve them for our mutual welfare.

Vol. 10 May 1, 1930 No. 9

What is YOUR Name?

RECENTLY a writer undertook to explain why some men get $500 a month while others work for $100.

Here's the substance:

Three brothers left the farm to work in the city, and all got jobs in the same company, starting out at the same pay. Six years later one was receiving $100 a month, a second $200, and the third $500.

Their father, hearing of these salaries, decided to visit his sons' employer and find out why they were paid on what seemed to be such an unfair basis.

"I will let them explain for themselves," said the boss, as he pressed a button under his desk.

Jim, the lowest paid man of the three, answered.

"I understand the *Oceanic* has just docked," said the employer. "Please go down there and get an inventory of her cargo."

Three minutes later Jim was back in the office.

"She carries a cargo of 2000 sealskins," replied Jim. "I got the information from the first mate over the telephone."

"Thank you, Jim," said the boss. "That will be all."

He pressed the button again, and Frank, the $200 man, reported.

"Frank, I wish you would go down to the dock and get an inventory of the *Oceanic's* cargo."

An hour later Frank was back with a list showing that the *Oceanic* not only carried 2000 sealskins, but that she also had 500 beaver and 1000 mink pelts.

The employer pressed the button a third time and George, the $500 man, walked into the office.

He got the same instructions his brothers had received.

George did not return for three hours, and the office had closed for the day, but his father and boss were waiting for him.

"The *Oceanic* carries 2000 sealskins," he began. "They are offered at $5 each so I took a two day option on them, and I have wired a prospect in St. Louis, offering them to him at $7. I expect to have his order tomorrow. I also found 500 beaver, which I sold over the telephone at a profit of $700. The mink pelts are of poor quality, so I didn't try to do anything with them."

"That's fine," said the boss.

Then, when he had gone, the employer turned to the father and smiled.

"You probably noticed," he said, "that Jim doesn't do as he's told, Frank does as he's told, while George does without being told."—*Transportation News.*

Memorial Service

ON Sunday, May 11, at 3:30 P. M., the Veterans Associations of The Delaware and Hudson Railroad and The Delaware, Lackawanna, and Western will meet in the First Presbyterian Church, in Chenango Street, Binghamton, in a joint service in memory of the Veterans who died during the past year. It is understood that the New York, Ontario and Western and Erie Railroad Veterans will also join in the memorial service.

Famous Family

THE Father of success is Work. The Oldest Son is Common Sense. Some of the other boys are: Perseverance, Honesty, Thoroughness, Foresight, Enthusiasm, Co-operation.

The Mother of success is Ambition. The Oldest Daughter is Character. Some of the sisters are: Cheerfulness, Loyalty, Courtesy, Care, Economy, Sincerity. The Baby is Opportunity. Get acquainted with the "*old man*" and you will be able to get along pretty well with the rest of the family.—*Hammermill Bond.*

Veterans Hold Record-Breaking Meeting at Wilkes-Barre

PERFECT spring weather, special train facilities, and a record-breaking turnout, combined to make the spring business meeting of The Delaware and Hudson Veterans Association, Sunday, April 13, most enjoyable. The indications that it would be a bright, sunny day brought out a large group of Capital District members, whose number was increased from station to station south of Albany, so that by the time the special train of three coaches and a diner reached Wilkes-Barre there were nearly 250 Veterans aboard.

In the absence of PRESIDENT H. N. ATHERTON, whose sudden illness prevented his attendance, VICE-PRESIDENT GEORGE LORENZ presided over the meeting, which was held in the Capitol Theatre. Following the recitation of the *Lord's Prayer* and the singing of one verse of *America*, GAVIN BURT of the Pennsylvania Division rendered two vocal solos, accompanied by Miss Lillian Eckman at the piano.

By way of entertaining the ladies while the meeting was in progress, a scenic automobile tour of Wilkes-Barre and neighboring communities had been arranged. Nearly 70 members of the Ladies Auxiliary were driven to points of interest in Wilkes-Barre, Plymouth, Buttonwood, Kingston, and Forty-Fort, returning just in time for the homeward trip.

Due to the absence of PRESIDENT ATHERTON the more important items of business were laid on the table for action at the next meeting. One matter, that of substituting a written resolution of sympathy for the flowers now sent upon the death of a member, was brought up and carried. A committee was appointed, consisting of N. S. BURNS, D. F. WAIT, J. T. CONNORS, J. B. SAMPSON, and JAMES O'CONNELL, to make the selection of the form of certificate to be used, their choice to be submitted to the members at the next meeting.

Brief talks were given by L. F. PERRY, Edward Martin of the Delaware, Lackawanna, and Western Veterans, George L. Greeley, New York, Ontario, and Western's Association, Ben E. Chapin, editor of *The Railroad Employe*, and W. T. CAMPBELL, past president.

Resolutions were also passed instructing the Secretary to thank the Management for the special train, dining service, and other courtesies. Thanks were also expressed to the Wilkes-Barre city officials and the management of the Theatre for their assistance in making the meeting so successful. On the return trip the train, laden with tired but happy veterans, left Wilkes-Barre at 4:30 P. M. arriving in Albany shortly after 11 o'clock.

Learned Telegraphy on Door-latch

(Continued from page 132)

first day as operator at Chazy Lake, MR. WILSON still remembers the first message he ever received from the dispatcher. It read, "Flag and hold No. 3 for orders." In a few minutes the second came over the wire, "No. 3 meet No. 4 at Chazy Lake." Nearly twenty-seven years later he received his last message at the same station: "Engine 593 run extra Chazy Lake to Plattsburg." In those intervening years, however, he became one of the best known men on the line.

There were no set working hours on the old Chateaugay; he went to work when the first train left Plattsburg in the morning and remained at the key until the last train was cleared at night. In the winter that "last train" often did not arrive until late, sometimes it was "lost" for a whole day. At such times he had to stay on duty until it arrived regardless of how long it might be.

Time passed quickly, however, for there were many incidents to vary the hours spent at Chazy Lake. One day the dispatcher called to tell him that a car of iron ore had broken away at Lyon Mountain and was coming down the track toward his station. For a time excitement reigned; later the runaway was found on the track a few miles above his station. "The funny part of the whole affair," he says, "was this: I couldn't have done anything to stop it. I had no key to open the switch and let it into the siding. All I could do was 'report the departure of the runaway' if it ran by my station."

Another incident which stands out in his mind developed when the dispatcher sent out a "lap order" by mistake. One crew had been given a clearance card to run from Lyon Mountain to Dannemora. Two others were approaching Chazy Lake with orders to run to Lyon Mountain without any restrictions. MR. WILSON, who was "listening in" on the wire, noticed the error and put his order board out to stop the two eastbound trains and hold them until the westbound freight arrived, thus avoiding a head-on collision.

The Chateaugay locomotives carried no numbers when MR. WILSON first went to work; they were known by name only. Some of them were

the *Plattsburg, Saranac, Lyon Mountain, St. Regis, Mirror Lake, Crown Point,* and the *Dannemora.* Engine No. 2, one of the first to be designated by a number, had no tender at all. Its coal and water were carried above the boiler in front of the cab. Numbers 15 and 16 were the first locomotives equipped with air brakes to operate over the branch.

One of the things for which MR. WILSON was best known on the line was his hobby of collecting guns. At times he had as many as twenty in his home. When business was slow he would "blaze away" at nearby objects. One gun in particular was known for miles around. It was an old army rifle which had quite a reputation for long distance shooting.

Nothing was more satisfying to MR. WILSON than his work. Had it not been for the fact that his hearing became poor last year he would never have been content with retirement. "To me," he says, "railroading is the greatest game in the world. Every day's work is different and a fellow has to be on his toes every minute. If I had it to do over, I would go right back to my old job of handing out orders to the trains on the Chateaugay."

Self-Clearing Hopper Cars

(Continued from page 137)

end sills, connecting angles and striking castings. In this connection, four hundred rivets are driven.

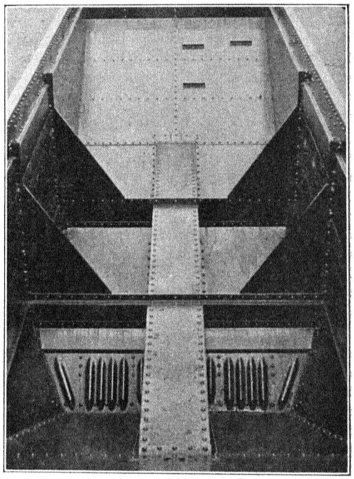
4.—*Completion of Underframe Construction:* Eleven men are employed at this "station". The work involves the assembling, fitting and riveting of bolster top cover plate, end sills, center sill top cover plate, diagonal braces, center plates, striking castings and connection angles; riveting of side frames to the underframe, and applying and fitting the bottom section of the side hopper sheets. This operation also includes the application of the brake cylinder and air reservoir. The work described involves the driving of eight hundred and fifty rivets.

5.—*Construction of Ends and Top Section of Slopes:* Three men are engaged in the assembling, fitting and riveting of the ends, top slope sheets, end sheets, end bulb angles, corner posts and end braces. The high powered hand brake and component parts are also applied here, the entire operation entailing the driving of three hundred rivets. An air motor hoist is employed to handle sections of the car ends while under construction and to place them in position on the underframe preparatory to the next "station" operation.

6.—*Setting up Ends, Slopes, and Diagonal Braces Preparatory to Riveting:* Here the ends are fitted to the side frames and underframes, the body slope sheets, hopper sections and vertical diaphragms are reamed and fitted, all being done by a crew of five.

7.—*Riveting of Slopes and Hopper Section:* There are six men employed in the remaining riveting of slopes and hoppers, in the performance of which operation six hundred and fifty rivets are driven.

8.—*Building, Handling and Fitting Doors:* Here there are four men assembling, handling,



Looking Inside Car

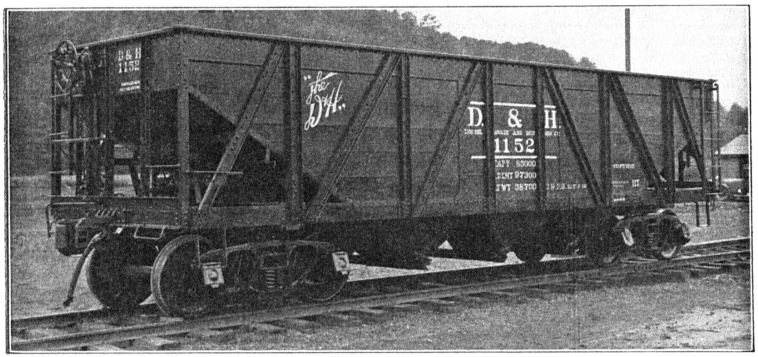
and riveting doors and slope supports, also applying door locks and couplers, which involves the driving of two hundred twenty-five rivets.

9.—*Fitting and Bolting Side Planks:* There are three men engaged in the fitting and application of body side planks, steel ladders, uncoupling levers and other safety appliances. The fitting of these side planks is facilitated by the use of a portable pneumatic hand saw and a similar saw of larger size mounted on a table. As a preventive against decay and corrosion

parts are treated with car cement where wood comes in contact with metal.

10.—*Air Brakes:* Two men are employed at this station. This operation involves the application and testing of the foundation brake gear and the piping of each car complete.

Before the work of assembling is undertaken, all metal parts are treated with red lead where they are connected. Subsequently the entire steel body structure is sprayed with red lead and the wooden side planks receive a spray coat of freight car brown, a mineral paint. When the paint has dried the entire car body is sprayed with freight car brown after which the car is stenciled and ready for service. The trucks are coated with a black metal preservative paint.



Ready for Service

America's First Freight Tariff

Delaware and Hudson Managers Adopt Rates Proposed by Mr. John B. Jervis, May 5, 1830

By W. J. Coughtry, Recorder

BACK of the safe, speedy and economic movement by the railways of the enormous present-day freight traffic of our country lies a very important instrument—the freight tariff. The freight tariff is one of the principal features of modern progress that have exercised a stupendous influence upon the entire industrial and commercial development of the United States. Involving in its preparation some of the most complicated problems that ever puzzled mankind, it is the medium through which the traffic departments ceaselessly struggle to attract freight for transportation over their respective systems.

Let us pause in the constant passage of events and gaze backward to trace the origin of this important agency.

The first known proposed freight tariff in America was suggested by Robert Fulton who, in a letter to Thomas Mifflin, Governor of Pennsylvania, in 1796, advocating the construction of a canal between Pittsburgh and Philadelphia, practically constructed for this projected line a freight tariff analogous to those later in force on many railways.

The first known freight tariff put in force on an American railroad was one prepared by Mr. John B. Jervis, Chief Engineer, and adopted by the Board of Managers of The Delaware and Hudson Company on May 5, 1830, fixing tem-

porary rates for the transportation of freight over the company's railroad between Carbondale and Honesdale, Pa. The record in the minutes of the meeting on that day is:

"A Table of Tolls and transportation calculated by Mr. Jervis, fixing the rate to be charged on goods transported over the Rail Road was submitted. The new state of the work, and the shortness of the time since the commencement of operations this Spring with ropes instead of chains not having afforded sufficient experience to enable the Board to fix on permanent rates of toll, especially on transportation Eastward, and the Board being desirous of affording every possible facility to the trade of the country, a partial rate was thought proper to be adopted as an experiment which could be renewed as the season advances, and be reduced or increased as from longer experience may seem to be proper, and on motion it was

RESOLVED, That the articles enumerated in Mr. Jervis' report No. 1. 2. and 3 be accepted, and for the present be the rate of toll and transportation to be charged on those articles, and that non-enumerated articles be taken at the rate specified for articles named in Number 3.

That Salt, Lime, Sand, Grain and similar articles will not be taken in bulk, except with an addition of fifty per cent."

These tables, unfortunately, were not spread upon the minutes.

After some three months of actual transportation experience the Board of Managers, on August 25, 1830, adopted the following freight tariff which covered many commodities not enumerated in the original:

"A Table of Tolls and transportation on the Rail Road, prepared by the Chief Engineer, and submitted by the President in his letter of the 4th instant was laid before the Board, and was as follows, viz:

EXPLANATION OF THE TABLE When toll & transportation are specified for the Total amount from Honesdale to Carbondale, it is intended to be for the whole length of Road and the same whether going to or from Honesdale. For all articles charged by weight 2000 lbs. is taken for a Ton except Anthracite Coal.	RATES OF TOLL				Transportation from Honesdale to Carbondale.		Toll & Transportation from Honesdale to Carbondale.	
	For each Steam Engine Plane	For each Gravitating Engine Plane	Per mile of Road	Total from Honesdale to Carbondale	By wagons belonging to the Del. & Hud. C. Co.	By wagons belonging to owners of freight	By wagons belonging to the Del. & Hud. C. Co.	By wagons belonging to owners of freight
	Cents	Cents	Cents	$	$	$	$	$
1st Salt, Gypsum, Lime, Iron Ore, Sand and Stone, per ton	3	2	1	.37	.38	.28	.75	.65
2nd Flour, Meal, Grain, Salted provisions Pot & Pearl Ashes, per ton	5	2	1½	.55	.40	.30	.95	.85
3rd Merchandise, including sugar, Molasses, liquor, Iron, Iron Castings & Cotton in bales or bags per ton	5	3	2	.66	.45	.35	1.11	1.01
Boards, Plank, Scantling or other Lumber of suitable dimensions for transportation on Rail Road wagons per 1000 feet inch measure as follows (to wit)								
Pine and Hemlock, unseasoned	6	4	2	.74	.75	.60	1.49	1.34
ditto seasoned	5	4	2	.69	.60	.45	1.29	1.14
All kinds of Hard Lumber, unseasoned	9	6	2½	1.03	1.00	.80	2.03	1.83
ditto seasoned	7	5	2	.82	.90	.75	1.72	1.57
Shingles (of 18 in. length) per 1000	1	½	½	.14½	.06	.05	.20½	.19½
Anthracite coal per ton	4	3	2	.61		.35		.96
On wagons used principally for conveying Passengers	20	15	30	6.25				
Articles not Enumerated per ton	4	3	2	.61	.40	.30	1.01	.91
Salt, Grain, Lime & Ground Plaister or Cement, in Bulk 50 per cent additional in company's wagons.								

Clicks from the Rails

Man Rescued from Bridge

CONDUCTOR TARIO of our southbound "Laurentian", No. 34, recently rescued a man from the ends of the ties on the St. Lawrence River bridge at Westmount. The man was walking the bridge when he was overtaken by the train. Realizing that he could not get off of the bridge in time, he let himself down through the ties hanging by his finger tips seventy-five feet above the river. He was unable to hold on, however, and pulled himself up and laid down on the end of the ties. The journal boxes of the five cars which passed over him before the train was brought to a stop tore off part of his clothes. The Conductor opened the door, reached down, and pulled him aboard the train. He was let off at the other end of the bridge.

* * *

A Conscience Fund Contribution

The conscience fund of the Northern Pacific was increased $1.25 last week. A letter and check from a conscience-stricken man said he felt he had caused that amount of damage to the Northern Pacific railroad when a boy. The letter follows: "Enclosed find $1.25. When I was a boy, I broke a window in a caboose accidentally, and another time at a wreck I took an oil cup as a souvenir. I think $1.25 will cover, including the Old Testament standard of one-fifth added for damages 'The Lord has saved me from sin and is helping me make things right.'"—*Railway Age.*

* * *

A Thrifty Wife

Mrs. Newman, wife of a Norwalk Railway signalman, in England, is a great saver of pennies. According to a story recently published in the papers, her husband saw a house that he admired. "We'll buy it," remarked Mrs. Newman. When her husband asked what she would buy it with, she displayed her collection of pennies. She had more than enough to pay for the house, all accumulated in seventeen years.

New Type of Headlight

The Pennsylvania Railroad plans to equip a passenger locomotive, to be operated in Ohio, with a headlight so adjusted that the rays will be projected vertically for several hundred feet to determine its usefulness in preventing grade crossing accidents. It is believed that such a light will be seen by motorists at a much greater distance than those of the usual type.

* * *

"Head Work"

CADILLAC, Mich.—Having fallen from the top of a moving freight train between two cars, Merle Todd, eighteen, is expected to recover. He struck the air hose, parting it and stopping the train before the wheels reached him.—*Albany Evening News.*

* * *

Orient's Longest Tunnel

The longest railway tunnel in the Orient, and the seventh longest in the world, was scheduled for completion on the Shimizu Railway in Japan early this year. The six mile tunnel which runs from Gumma to Niigata, cost nearly $20,000,000. The final blast was exploded electrically by Dr. Yoku Egi, Minister of Railways, from his office in Tokyo, 100 miles away.—*Railway Age.*

* * *

Office Below Sea Level

The trainmaster's office at Indio, Cal., on the Southern Pacific is probably the only one in the country situated below sea level. Just in front of the office is a neat sign, bearing the inscription: "Indio, Cal., 22 ft. below sea level."

Once a Station Agent

Richard W. Sears, one of the founders of Sears, Roebuck & Co., started in business this way:

He was a railroad station agent at North Redwood, Minnesota. While there he conceived the idea of sending gold watches, express collect, to fictitious names at various station offices. Then when the station agent wrote that the watch was uncalled for, Sears would offer the agent a commission to sell the watch.

So many bought the watch for personal use or sold it to make a commission that Sears soon had a profitable business. He moved to Chicago and opened a store to sell watches by mail, employing A. C. Roebuck, a jeweler, for an asistant.—*Through the Meshes.*

* * *

Crossing Watchman Saves Autoist

Frank Soltes, Pennsylvania Railroad crossing watchman, West Pullman, Ill., played a heroic role recently, when he pushed a stalled automobile off his crossing as a light engine approached. The driver of the car was so frightened that he was unable to move from his seat.

When the engine stalled on the track, Soltes noticed that the driver was helpless with fear and jumped to his assistance, barely having the car clear of the crossing when the engine rushed past. Had the machine been struck by the locomotive, there is little doubt that Soltes would have lost his life along with that of the driver.

* * *

Much Energy Required

"It takes a lot of 'elbow grease' to blow my locomotive's whistle on a trip between McComb, Miss., and New Orleans, La., 105 miles apart," says Engineman J. H. Morgan. "To make the whistle blast effective, an engineer must produce a 10-lb. pull on the cord, and in the 376 times that the whistle should be blown on my run one way, there is a total of 3,760 pounds of cord pulling."

Mother

MOTHER is the truest friend we have, when trials, heavy and sudden fall upon us; when adversity takes the place of prosperity; when friends who rejoice with us in our sunshine desert us; still will she cling to us, and endeavor by her kind precepts and counsels to dissipate the cloud of darkness, and cause peace to return to our hearts.—*Washington Irving.*

(Mother's Day, Sunday, May 11th)